

Work Order ID 65151

January 6, 2011 2:51:22 PM



Page 1

Item ID: D6101-003

Accept



Setup Start



Revision ID:

Stop



Item Name: Saddle Billet, 7075

Start Date: 1/06/11

Start Qty: 30.00



Cust Item ID:

Required Date: 1/21/11

Req'd Qty: 30.00



Customer:

Reference:

Approvals:

Process Plan: CL

Date: 11/01/07

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D6101

Rev B

100

0.00



PURCHASING

Purchasing

Memo

0.00

Purchasing

Issue P/O: 13235

a) Description: Alluminum billet

b) 7.875" x 6.250" x 2.00" thick

c) Tolerance on all dimensions are +0.030"/-0.000"

d) Grain direction along 7.875" length

e) Material: 7075-T7351 (QQ-A-250/12)

f) Material certification required

CL 11/01/07 (20)

110

Receive & Inspect for Damage & Mat'l Certs

0.00



Packaging

Memo

0.00

Packaging

Ensure material certification is attached

CL 11/01/10 (20)

Work Order ID 65151

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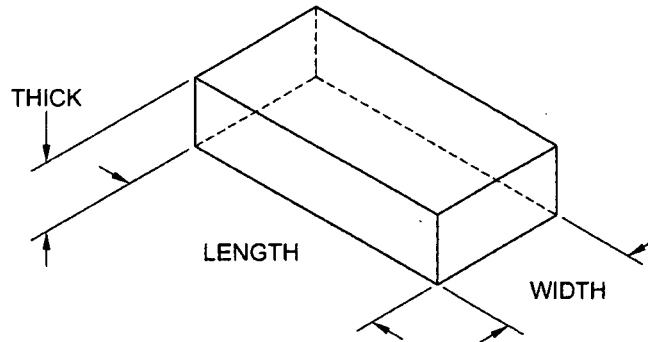
Page 2

Item ID:	D6101-003	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Saddle Billet, 7075					
Start Date:	1/06/11	Start Qty:	30.00		Cust Item ID:	
Required Date:	1/21/11	Req'd Qty:	30.00		Customer:	
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 	QC6- Inspect dimensions to drawing	0.00				20	0		
QC Quality Control	Memo Ensure Material certification comply to Dwg D6101 <i>SH 11/1/11</i>	0.00							
130 	Identify as per dwg & Stock Location <i>cwc</i>	0.00				20	0		
Packaging Packaging	Memo <i>SH 11/1/11</i>	0.00							
140 	QC21- Final Inspection - Work Order Release	0.00							
QC Quality Control	Memo <i>11/01/12 JF</i> <i>CL 11/01/11</i>	0.00							

SPECIFICATION CONTROL DRAWING



PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH x WIDTH x THICK (+0.030/-0.000), AND GRAIN DIRECTION AS SHOWN.

TOLERANCES ON ALL DIMENSIONS ARE +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES.

CL 1110106
W10.65151

B ACCEPTABLE SPECIFICATIONS FOR 7075-T7351 ALUMINUM ARE AMS-QQ-A-250/12, QQ-A-250/12, OR ASTM B209

Part No.	Alloy	Length	Width	Thick	Grain Direction
D6101-001	7075-T7351 (QQ-A-250/12)	6.000	6.250	2.000	Along 6.000 Length
D6101-003	7075-T7351 (QQ-A-250/12)	7.875	6.250	2.000	Along 7.875 Length
D6101-005	7075-T7351 (QQ-A-250/12)	5.000	8.250	2.500	Along 5.000 Length
D6101-007	7075-T7351 (QQ-A-250/12)	7.750	8.250	2.500	Along 7.750 Length
D6101-009	7075-T7351 (QQ-A-250/12)	8.700	8.250	2.500	Along 8.700 Length
D6101-011	7075-T7351 (QQ-A-250/12)	9.700	8.250	2.500	Along 9.700 Length
D6101-013	7075-T7351 (QQ-A-250/12)	10.100	8.250	2.500	Along 10.10 Length
D6101-015	7075-T7351 (QQ-A-250/12)	9.450	6.250	2.500	Along 9.450 Length
D6101-017	7075-T7351 (QQ-A-250/12)	6.350	6.250	2.250	Along 6.350 Length

B

RELEASED
09/07/15/WB

B	ADDED D6101-015/-017, ADD ASTM B209	RF	09.04.23
A	NEW ISSUE	CP	01.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D6101	SHEET 1 OF 1
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	SADDLE BILLET, 7075	NTS
DATE	09.04.23	<small>COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO13235

Purchase Order Date 1/07/11

PO Print Date 1/07/11

Page Number 1 of 2

Order From :

VG-MET001

METAUX CASTLE

A.M. CASTLE & CO. (CANADA) INC. - BOX B9204 PO BOX 9100

TORONTO, ON M4Y 3A5

CA

Contact Name

Vendor Phone

514 694 9575

Vendor Fax

514 695 3281

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

CANADA

FAXED
1/10/11

e-mail me

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	D6101-003P	7075-T7351 2X6.25X7.875	1/11/11 Yes	20.00 Each	Yours ppd	\$59.1600	\$1,183.20
Special Inst: AS PER DWG D6101 REV. B B65151 MATERIAL: 7075-T7351 (QQ-A-250/12) SIZE: 7.875" X 6.250" X 2.00" THICK GRAIN DIRECTION ALONG 7.875" LENGTH TOLERANCE ON ALL DIMENSIONS ARE + 0.030" / -0.000" PLAEASE SHIP ASAP							
2	D6101-003P	7075-T7351 2X6.25X7.875	1/21/11 Yes	10.00 Each	Yours ppd	\$59.1600	\$591.60
Special Inst: MATERIAL & SIZE AS ABOVE B65175							
3	D6104-005P	17-4 SS Roundbar 4.00"OD	1/21/11 Yes	10.00 Each	Yours ppd	\$76.0000	\$760.00

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required when applicable

Change Nbr: 1

Change Date: 1/07/11

**Castle Metals®**

A. M. Castle & Co.

PACKING SLIP

Page 1 of 1

Shipment No:631005

Ship From: Castle Metals MONTREAL 835-SELKIRK AVENUE POINTE CLAIRE, QUEBEC H9R 3S2		Sold To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7		Ship To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7		Deliver To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA	
Date Shipped 07-JAN-11	F.O.B. ORIGIN	Freight Terms Prepaid		Carrier MANITOULIN		BOL No 631005-2	

Shipment Details	Final Destination Branch - MON
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Order No 1125882	Line No 1	Item No 6857.MO	Description 2.0000.PL.7075.T7351.ALUMINUM.48.5000.144.5000 CUT 2SIDED TO 6.25 IN (+ .0310/- .0000 IN (GRAIN TO RUN ALONG 7.875")) X 7.875 IN (+ .0310/- .0000 IN (GRAIN TO RUN ALONG 7.875")) - ALUMINUM PLATE SAW SPECIFICATIONS: AMS-QQ-A-250/12				
Purchase Order No 12019 13235		Part Number YOUR ITEM NUMBER: D6101-003		Ordered Qty 20 PCS		Invoice Qty 20 PCS	
Details		DO NOT SHIP - HOLD UNTIL ADVISED					
Delivery No. 58521339	Mill	Heat Number 506772A3	Mech Id	PCS 20	Width (IN)	Length (IN)	Shipped Qty (LBS) 203.22

These commodities/technologies are subject to US Export Administration & US State Dept. Regulations and, if intended for export, were/are exported thereunder. Diversion contrary to US Law is Prohibited.

We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer cannot be returned for credit.

Reviewed by Authorized Castle Metals Representative:

Date:

SHIP TO:
A M CASTLE & CO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

**KAISER
ALUMINUM**

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

SOLD TO:
AM CASTLE & CO- SOLD TO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

CERTIFIED TEST REPORT

Serial Number
4193016

CUSTOMER PO NUMBER: 45811		WORK PACKAGE:		CUSTOMER PART NUMBER: 6857 AMC A97075-160		SHIP RUN/LOAD: 101791/19		GOV'T CONTRACT NUMBER:		
KAISER ORDER NO: 1096361	LINE ITEM: 1	SHIP DATE: 7-MAY-2010		ALLOY: 7075	CLAD: BARE	TEMPER: T7351	PRODUCT DESCRIPTION: Sawed Plate			
WEIGHT SHIPPED: 8224 LB		QUANTITY: 6 PCS EST.		B/L NUMBER: 2027222		GAUGE: 2.0000 IN		DIAMETER/WIDTH: 48.500 IN		LENGTH: 144.500 IN

Certified Specifications

AMS 4078/RevG
ASTM B 209/Rev07
BSS 7055/RevA
DPS 4.713/RevAH
MMS 159/RevN

AMS-QQ-A-250/12
ASTM B 594/Rev06
CMMP 025/RevS
GAMPS 9101/RevB
PS 21211/RevK

AMS-STD-2154
BAC 5439/RevH
CSTI 006/RevC
GSS1610Q/RevG/Amd1

Test Code: 4297

Test Results

Lot: 506772A3 Cast 314

Drop 04

Ingot 2

(ASTM E8/B557)

(EN 2002-1)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min:Max)	72.5 : 72.6 (500 : 501)	61.3 : 61.8 (423 : 426)	12.5 : 13.3

(ASTM E1004)

(EN 2004-1)

Conductivity %IACS :	41.3 Min	41.9 Max
(MS/M) :	24.0 Min	24.3 Max

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.09	0.17	1.4	0.04	2.4	0.20	5.5	0.04	0.01	0.01	TOT 0.05

**KAISER
ALUMINUM**

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4193016

ALLOY LIMITS

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
7075 MIN	0.00	0.00	1.2	0.00	2.1	0.18	5.1	0.00	0.00	0.00	EACH	0.05
MAX	0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.05	TOT	0.15

Aluminum Remainder**TEST NOTES**

7075-T7351 plate 3.501-4.000" thick, if
ultrasonically inspected, meets requirements of CMMPO25 per
SDR CMMPO25-KaiserT-3. 7075-T7351 plate 4.001-5.000" thick,
if ultrasonically inspected, meets requirements of CMMPO25
per
SDR CMMPO25-KaiserT-2.

Metal represented by this test report was immersion
ultrasonically tested from one side and meets the Class A
and Class B requirements of all specifications referenced
on this test report.

Castle Metals FP

HEAT NUMBER 506772 A 3
MECHANICAL ID _____
ITEM CODE 6857
LOT NUMBER _____
PO NUMBER 45811
RECEIPT DATE 5-11-2010
SUPPLIER KAISER
SPECIFICATION _____
LCS NO
COMMENT _____
APPROVED BL

CERTIFICATION

KAISER ALUMINUM FABRICATED PRODUCTS, LLC (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED IN THE UNITED STATES OF AMERICA OR A QUALIFYING COUNTRY PER DFARS 225.872-1(b), WAS MANUFACTURED IN THE UNITED STATES OF AMERICA, AND MEETS THE REQUIREMENTS OF DFARS 252.225 FOR DOMESTIC CONTENT. THIS MATERIAL HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF KAISER ALUMINUM FABRICATED PRODUCTS, LLC LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTIRE ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. ISO-9001:2000 CERTIFIED.

BILL POYNOR, LABORATORIES SUPERVISOR

Bill Poyner